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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,361	06/13/2001	Joseph H. Hoffman	EKM-80279	8740

7590 12/06/2002

James R. Brueggemann, Esquire
Sheppard, Mullin, Richter & Hampton LLP
48th Floor
333 South Hope Street
Los Angeles, CA 90071

EXAMINER

BLAU, STEPHEN LUTHER

ART UNIT	PAPER NUMBER
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3711

DATE MAILED: 12/06/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/881,361

Applicant(s)

HOFFMAN ET AL.

Examiner

Stephen L. Blau

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-4, 6, 8-9, 11, and 15 stand rejected and claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 9-248355 in view of Kochevar (4,220,336) and WO 00/62873.

JP 9-248355 discloses a hosel plug being cylindrical in the form of fitting in a hole which has a diameter, a shaft secured to the hosel cavity at a location above the hosel plug, a plurality of plugs each having the same size and shape but different weights, and plug weights in the range of (.5-3) grams (Solution).

JP 9-248355 lacks a plug having a metallic powder, a compliant polymeric material compression fitted into the hosel cavity by slight compression without a need of deforming a plug from its substantial shape, and different plug weights based on the amount of powder mixed into the plug material. Kochevar discloses a weight slug placed inside a shaft formed of a deformable binder, a powdered metal (Col. 5, Lns. 36-50), and varying the proportions of the materials to achieve desired results (Col. 5, Lns. 67 through Col. 6, Ln. 2). WO 00/62873 discloses a deformable insert being placed

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inside a shaft being a polymer material (Page 8 Lns. 14-15) and compression fitting into a shaft (Page 12 Lns. 9-11) by slight compression without a need of deforming a plug from its substantial shape (Figs. 2, 3A, and 5A). In view of the patent of Kochevar it would have been obvious to modify the club of JP 9-248355 to have a plug being a deformable binder with a metal powder in order to simplify the assembly process by deforming the shape to fit a cavity instead of requiring more precise dimensions to ensure proper fitting. In addition, in view of the patent of Kochevar it would have been obvious to modify the club of JP 9-248355 to have different plug weights based on the amount of powder mixed into the plug material in order to provide a variety of weights from which a golfer would choose from to adjust a clubs swing weight. In view of the document WO 00/62873 it would have been obvious to modify the club of JP 9-248355 to have a binder being a compliant polymeric material compression fitted into the hosel cavity by slight compression without a need of deforming a plug from its substantial shape in order to have a plug which returns to the original form when a stress is removed so that the plug is more easily handled and stored without deteriorating, in order to have a clean method of fixing a plug to a cavity without the use of an adhesive, and in order to be able to temporarily fix a plug to a cavity.

3. Claims 2 and 13-14 stand rejected under 35 U.S.C. 103(a) as being unpatentable over JP 9-248355 in view of Kochevar (4,220,336) and WO 00/62873 as applied to claims 1, 3-4, 6, 8-9, 11, 15 and 17-18 above, and further in view of Yoneyama and Sasamoto.

JP 9-248355 lacks a metallic powder being tungsten, a polymeric material being nylon, and tungsten having a weight percentage in the range of 0-96 %. Kochevar discloses a metal lead metal powder added to a plug with a weight percentage of 90 % (Col. 5, Lns. 60-65). Yoneyama discloses a metallic powder added to a head weighting member being lead or tungsten (Col. 3, Lns. 28-40). In view of the patent of Kochevar and Yoneyama it would have been obvious to modify the plug of JP 9-248355 to have a metallic powder being tungsten in a weight percentage of 90 % and varied from that amount to achieve different weighted plugs in order to add more weight for the same volume of powder added to a plug compared to lead. Sasamoto discloses a weighting member being made of a binder and metal powder with the binder being nylon (Col. 3, Lns. 58-68). In view of the patent of Sasamoto it would have been obvious to modify the club of JP 9-248355 to have a polymeric material being nylon in order to utilize a polymeric material available in the market place and to utilize the characteristics of nylon.

4. Claims 5 and 12 stand rejected under 35 U.S.C. 103(a) as being unpatentable over JP 9-248355 in view of Kochevar (4,220,336) and WO 00/62873 as applied to claims 1, 3-4, 6, 8-9, 11, 15, and 17-18 above, and further in view of Bingman.

JP 9-248355 lacks a hosel's lower cylindrical cavity having a diameter of about 8.5 mm and a length of 10 mm, a hosel's upper cylindrical cavity having a diameter of about 9 mm and a length of 25 mm. Bingman discloses a cylindrical cavity (32) for a shaft being 9 mm (Col. 4, Lns. 53-58) and an axial length of an upper section (36) of a

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cylindrical cavity being 10 millimeters (Col. 4, Lns. 49-54) with an addition hosel depth below the upper section (Ref. No. 32, Fig. 3). Clearly with that addition of the lower hosel bore (32) the total hosel length would be over 20 mm. An artisan skilled in the art of designing a hosel enough surface area to form a secure attachment to a shaft would have selected a suitable length bore for a hosel in which 25 millimeters is included. In addition, an artisan skilled in the art of forming a lower hole for a weight plug smaller in diameter than a hosel hole which fits a shaft would have selected a suitable diameter and depth of a hole to prevent the shaft from entering and to add sufficient weight in which a hole of 8.5 mm in diameter and 10 mm in depth is included.

In view of the patent of Bingman it would have been obvious to modify the club of JP 9-248355 to have a hosel's upper cylindrical cavity having a diameter of about 9 mm in order to fit a shaft having a tip diameter of 9 mm. In addition, it would have been obvious to modify the club of JP 9-248355 to have a cavity length of 25 mm in order to have sufficient surface area to attach a tip end of a shaft to a head.

It would have been obvious to modify the club of JP 9-248355 to have a hosel's lower cylindrical cavity having a diameter of about 8.5 mm in order to prevent a shaft having a diameter of 9 mm from placing stress on a plug and to have a cavity length of 10 mm in order to have sufficient volume to add a sufficient amount of weight to a club to affect the swing weight.

5. Claims 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 9-248355 in view of Kochevar (4,220,336) and WO 00/62873 as applied to claims 1, 3-4, 6, 8-9, 11, 15, and 17-18 above, and further in view of Allen.

JP 9-248355 discloses a plug having a weight of .5-3.0 grams (Solution).

JP 9-248355 lacks a plug constituting (.25 -3.25) % of the heads total weight. Allen discloses a head total weight being in a range of 190-205 grams. In view of the patent of Allen it would have been obvious to modify the club of JP 9-248355 to have a total head weight of 190- 205 grams in order to transfer energy to a ball at impact. As such the plug would constitute (.25 -3.25) % of the heads total weight.

6. Claim 16 stands rejected and claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 9-248355 in view of Kochevar (4,220,336), WO 00/62873, Yoneyama, Sasamoto and Allen.

See paragraphs above for elements of structure previously rejected by JP 9-248355 in view of Kochevar, WO 00/62873, Yoneyama, Sasamoto and Allen.

Response to Arguments

7. The argument that it is improper to combine the references of JB '355, Kochevar, and WO '873 due to there being no motivation is disagreed with. JB '355, Kochevar, and WO '873 all disclose teaching of adding plugs to a lower part of a golf club. Clearly the teachings of each of them can be used to attaching plugs to a cavity in a hosel. The argument that it is improper to use the reference of WO '873 since WO '873 does not

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disclose a polymer with metallic powder to weight a club is disagreed with. Kochevar was used to show the teaching of adding metallic powder to a binder to weight a club. WO '873 was used to show a suitable binder which is used for plugs attached to a lower end of a club. The argument that it is improper to use the reference of Kochevar since Kochevar discloses a putty-like consistency is disagreed with. Kochevar was used to only show that it is known to add metallic powder to weight plugs. JB '355, Kochevar, and WO '873 all show the three different material forms of plugs which are non-deformable solid, viscous (putty-like) and a deformable material which returns to its shape (non-viscous). Kochevar and JB '355 disclose different ways to weight plugs. Kochevar and WO '873 show different binders. The argument that it is improper to combine the references of WO '873 and Kochevar since it would cause it to lose its putty like consistency is disagreed with. Kochevar and WO '873 were used to show different binders. The deformable non-putty-like binder of WO '873 is a suitable substitute of the deformable binder of Kochevar. The Non-viscous material of WO '873 is non-viscous as is the material of JB '355. The argument that it is improper to use the reference of Billings since Billings did not disclose adding a weight within a bore is disagreed with. Billings was not used for this but to show a known hosel bore diameter and hosel bore depth. JB '355 was used to show the teaching of adding weight within a bore. The same response is applied to the argument towards Allen. Allen was not used to show the teaching of adding a weight within a bore but JB '355 was used to show this teaching.


8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Blau whose telephone number is (703) 308-2712. The examiner is available Monday through Friday from 8 a.m. to 4:30 p.m.. If the examiner is unavailable you can contact his supervisor Paul Sewell whose telephone number is (703) 308-2126. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0858.

Slb 5 December 2002


STEPHEN BLAU
PRIMARY EXAMINER